

## ABSTRACT OF THE INVENTION

The present invention provides novel compositions that find advantageous use in making electrodes for electrochemical cells. Also provided are electrochemical devices that include active oxygen reduction electrodes, such as solid oxide fuel cells, , sensors, pumps and the like. The compositions comprises a copper-substituted ferrite perovskite material. The invention also provides novel methods for making and using the electrode compositions and solid oxide fuel cells and solid oxide fuel cell assemblies having cathodes comprising the compositions.

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